be in the practical. In the present state of the profession, however, it is the theoretical more than the practical that has to be looked to, and a thorough grounding in most if not all of the above subjects required of engineers. I do not think this will ever be attained until there is some form of recognition of those engineers who have undergone a proper course of training in the profession, or had sufficient experience in the practical work of it, as to have given them considerable success in their work. To secure an examining body in different parts of New Zealand for granting degrees in civil engineering, I would suggest—(1.) A union of the usual teaching staff of the different institutions amalgamated with the New Zealand University at three or four of the principal towns with one or two civil engineers in practice. (2.) The establishment of an institute, similar to the New Zealand Institute in its relation to the Government, specially for the advancement of engineering science, to which would be admitted, as members, after the first six years, only those who showed that they had successfully passed the above or similar examinations, either in New Zealand or somewhere else; this institute, however, till time had been given to allow progress to be made by the above or similar course, to be open to all engineers in practice who could show—(*a*) a special training by apprenticeship or academical course, (*b*) the holding of a public position of some rank in the profession for three years, or (*c*) being in practice upon his own account for three years and having designed and carried out works of the aggregate value of say £20,000; this institute to nominate, year by year, such of its members as it considers best for the position of examiners, and also indicate the general scope of each year's examination. (3.) That it be a condition that before any candidate is eligible for a certificate in civil engineering he have passed an apprenticeship with a member of the institute for five years; that, however, a candidate may pass as a surveyor after an apprenticeship of three years.

6. Do I understand that, according to your proposal, the course of education would extend to ten years?—If the candidate showed sufficient proficiency before the end of ten years, and had served an apprenticeship of five, I should be satisfied.

7. *Professor Shand.*] In what way do you propose that apprentices shall receive their theoretical instruction?—So far as existing institutions for instruction are sufficiently developed, I would use them, and I should like chairs established in them for the more technical parts of the course.

8. If an institution is in a position to give instruction in mathematics, natural philosophy, chemistry, geology, botany, and drawing, what additional provision would it require to complete an engineering course?—The principal addition would be such as to provide instruction in masonry, bridges, foundations, carpentry, strength of materials, manufacture and qualities of cements and limes, and railway engineering with especial reference to curves, gradients, traction, &c. Some instruction in mining engineering would be required, at any rate so far as ventilation and drainage are concerned. There should also be instruction in the principles of machines.

9. Would the institution of a single chair be sufficient for all this?—I think so. Professor Rankine included all the subjects referred to in my last answer in the duties of a single chair. Of course a great deal of the practical part of this knowledge would be acquired in the course of service as apprentice.

10. What salary do you think would induce a properly-qualified man to undertake the duties of such a chair?—You could not put it at less than £600 a year; that is, for a six months' session.

11. Do you contemplate that the professor would be allowed to engage in private practice?—No; except as consulting engineer.

12. *Professor Sale.*] At what age do you think a young man should enter on his apprenticeship?—From fifteen to eighteen or, at the very latest, twenty.

13. Do you think it is desirable that, during the earlier part of his studies, he should receive a liberal education?—I would not have him spend much time at classics, but it would be well for him to acquire a knowledge of one or two modern languages.

14. Do you think that it is possible for a young man to prepare himself by the age of eighteen for such an examination as you propose to be passed at that age, without having for several years previously devoted himself exclusively to such preparation?—That would depend on the stringency of the examination. I should not expect a candidate to show more than a knowledge of the general principles of the subjects: even so, I think it would be an exceptional case for him to have a good knowledge of modern languages also; but that I deem of less importance.

15. *Professor Ulrich.*] During the remaining five or six years after the student has passed the examination to which you refer, do you think he would be capable of carrying on his theoretical studies concurrently with the practice required in the office and with the study of the strictly technical branches?—Yes. I think the practical and theoretical work would go well together, and assist each other; though a good deal of night-work would be sometimes required.

16. Under the title of "civil engineering" do you intend to include all kinds of engineering in this scheme?—Yes; the general principles would be acquired which are applicable to the several branches; and thus, if circumstances required the man to direct his attention to some special branch, he could follow it out by the special study of it.

17. *Professor Cook.*] Do you not think that the period over which the student's career extends in your scheme might be compressed?—I do not propose that every student should spend ten years in this course; but I have purposely put the limits wide apart to allow for all cases, and for possible interruption of a man's course by professional work in the field or from other causes.

18. Do you know the length of time during which an English engineering student serves as a pupil?—Usually three years, sometimes five.

19. Do you not think that three years' apprenticeship would be sufficient?—I would rather say five years in the colony, because so much time is taken up with surveying, and three years would not afford sufficient variety of experience.

20. In the event of sufficient means of instruction for engineers being provided in the colony, would you approve of any legal restriction being placed upon the practice of persons not duly qualified?—It would perhaps be desirable, but not until the system had been sufficiently established.

21. *The Chairman.*] Do you know if the want of an engineering school has been felt in any part of